



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,953	04/08/2005	Jek-Thoon Tan	U 015712-4	4507
140	7590	03/05/2008	EXAMINER	
LADAS & PARRY LLP			ANDRAMUNO, FRANKLIN S	
26 WEST 61ST STREET			ART UNIT	PAPER NUMBER
NEW YORK, NY 10023			2623	
			MAIL DATE	DELIVERY MODE
			03/05/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/530,953	TAN ET AL.	
	Examiner	Art Unit	
	Franklin S. Andramuno	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 04/08/05.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 84-154 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 84-154 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 04/08/05 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/12/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 84-154 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kellogg et al (US 2004/0027369 A1) in view of Fujii et al (US 5,898,695). Hereinafter referred as Kellog and Fujii.

Regarding claims 84 and 107, Kellock discloses an apparatus and method of providing an audio signal with an associated video signal (**Video analyzer (110) and Soundtrack analyzer (112) in figure 1**), comprising the steps of: decoding an encoded audio stream to provide an audio signal and audio description data (**Constructor (121) in figure 1**); and providing an associated first video signal at least part of whose content is selected according to said audio description data (**Soundtrack description (113) in figure 1**), wherein said providing step comprises: using said audio description data to select visual description data appropriate to the content of said audio signal (**Media Scene Graph (122) in figure 1**); constructing video content from said selected visual description data; and providing said first video signal including the constructed video content (**Output Production (108) in figure 1**). However, Kellog fails to disclose the use of a decoder. Fujii discloses on figure 1 the use of a video and an audio decoder.

Therefore, it would have been obvious at the time of the invention to include the use of a decoder. This is a useful combination because it allows the ability for music to be correlated to a video according to a rhythm. This will be of great use for Karaoke.

Regarding claims 85 and 108, Kellock discloses an apparatus and method according to claim 84, further comprising the step of extracting said visual description (**Video Description (111) in figure 1**) data from a transport stream (**Input Video (101) in figure 1**).

Regarding claims 86 and 109, Kellock discloses an apparatus and method according to claim 85, wherein said visual description (**Video Description (111) in figure 1**) data is extracted from private data within said transport stream (**Input Video (101) in figure 1**).

Regarding claims 87 and 110, Kellock discloses an apparatus and method according to claim 85, wherein said transport stream further comprises said encoded video and audio streams (**Input video (110) and Input Audio (102) in figure 1**).

Regarding claims 88 and 111, Kellock discloses an apparatus and method according to claim 87, wherein said audio description data in said encoded audio stream includes identification data and clock reference data for use with said visual description data in said same transport stream (**page 4 paragraph (0071) lines 11-13**).

Regarding claims 89 and 112, Kellock discloses an apparatus and method according to claim 88, wherein descriptors corresponding to said identification data and

clock reference data are stored in private sections of said visual description data (**page 4 paragraph (0061)**).

Regarding claims 90 and 113, Kellock discloses an apparatus and method according to claim 87, wherein said audio stream, said video stream and said visual description data are multiplexed into said transport stream which is transmitted in a television signal (**page 14 paragraph (0210)**).

Regarding claims 91 and 114, Kellock discloses an apparatus and method according to claim 87, wherein said step of using said audio description data to select appropriate visual description data comprises selecting visual description data from the same transport stream (**Input video (110) and Input Audio (102) in figure 1**).

Regarding claims 92 and 115, Kellock discloses an apparatus and method according to claim 83, further comprising the step of storing said extracted visual description data (**page 4 paragraph (0061)**).

Regarding claims 93 and 116, Kellock discloses an apparatus and method according to claim 92, wherein said step of using said audio description data to select appropriate visual description data comprises selecting stored visual description data (**page 4 paragraph (0062)**).

Regarding claim 94, Kellock discloses an apparatus and method according to claim 83, further comprising the step, prior to the step of extracting said visual description data, of encoding said visual description data (**Renderer (123) in figure 1**).

Regarding claims 95, 124, and 135, Kellock discloses an apparatus and method of delivering programme associated data to generate relevant visual display for audio contents (**Input video (110) and Input Audio (102) in figure 1**), said method comprising the steps of: encoding an audio signal and audio description data associated therewith into an encoded audio stream (**Constructor (121) in figure 1**); encoding visual description data (**Video descriptor (111) in figure 1**); and combining said encoded audio stream and said visual description data (**Media Scene Graph (112) in figure 1**); encoding a second video signal into an encoded video stream; combining said encoded video stream with said visual description data and said encoded audio stream into a transport stream; and further comprising transmitting said transport stream in a television signal (**Output Production (108) and Output Soundtrack (109) in figure 1**).

Regarding claims 96-97, and 125, Kellock discloses an apparatus and method according to claim 95, wherein said visual description data does not relate to the encoded video signal in the same transport stream (**Video Data and Sountrack data in figure 1**).

Regarding claims 98 and 126, Kellock discloses an apparatus and method according to claim 95, wherein said transport stream is an MPEG stream (**page 5 paragraph (0075) lines 18-20**).

Regarding claims 99 and 127, Kellock discloses an apparatus and method according to claim 83, wherein said visual description data comprises one or more of

the group comprising: video clips (**page 1 paragraph (0001)**), still images, graphics and textual descriptions (**page 13 paragraph (0207)**).

Regarding claims 100, 118, and 128, Kellock discloses an apparatus and method according to claim 83, wherein said visual description data is classified for use with at least one of at least one style of audio content, at least one theme of audio content and at least one type of event for which it might be suitable (**page 1 paragraph (0013)**).

Regarding claims 101, 119, and 129, Kellock discloses an apparatus and method according to claim 83, wherein said audio description data comprises data relating to at least one of the group comprising: singer identification, group identification, music company identification, service provider identification and karaoke text (**page 2 paragraph (0019)**).

Regarding claims 102, 120 and 130, Kellock discloses an apparatus and method according to claim 83, wherein said audio description data comprises data relating to the style of said audio signal (**page 2 paragraph (0034)**)

Regarding claims 103, 121 and 131, Kellock discloses an apparatus and method according to claim 83, wherein said audio description data comprises data relating to the theme of audio signal (**page 3 paragraph (0057)**).

Regarding claims 104, 122 and 132, Kellock discloses an apparatus and method according to claim 83, wherein said audio description data comprises data relating to

the type of event for which said audio signal might be suitable (**page 3 paragraph (0059)**).

Regarding claims 105, 123, 133, Kellock discloses an apparatus and method according to claim 83, wherein said audio description data is encoded within frames of said encoded audio stream, which frames also contain said audio signal (**Music analyzer (116) in figure 1**).

Regarding claims 106 and 134, Kellock discloses an apparatus and method according to claim 104, wherein said audio description data is encoded as ancillary data within audio frames of said audio stream (**Input Music (104) in figure 1**)

Regarding claim 117, Kellock discloses an apparatus according to claim 107, wherein said visual description data comprises one of: video clips, still images, graphics or textual descriptions (**page 1 paragraph (0001)**).

Regarding claim 136, Kellock discloses the method of claim 135, further comprising the preceding steps of: specifying preferred visual displays for the frames of said audio elementary stream; and constructing said audio description data using information relating to said preferred visual displays (**Input Music (104) in figure 1**).

Regarding claim 137, Kellock discloses the method of claim 135, wherein said specifying step comprises identifying at least one of the style of the audio content; the theme of said audio frame; an event associated with said audio frame; and keywords in

any lyrics of said audio frame; and further comprising specifying a most preferred visual display after the identifying step (**page 3 paragraph (0057)**).

Regarding claim 138, Kellock discloses the method of claim 136, wherein said specifying step comprises specifying the preferred visual display for each of said frames (**Input Images (103) in figure 1**).

Regarding claim 139, Kellock discloses the method of claim 135, further comprising inserting said audio description data in ancillary data sections of said audio frames in said audio elementary stream (**Music Description (304) in figure 3**).

Regarding claim 140, Kellock discloses the method of claim 135, wherein said constructing step comprises: specifying a unique identification code (**Figure 13**); specifying a distribution flag for indicating distribution rights; specifying the data type; inserting text description describing the audio content (**Automatic media analysis and construction (1705) in figure 17**); inserting data code describing said preferred visual display; and inserting user data code for generating the visual display (**Upload finished production (1710) in figure 17**).

Regarding claim 141, Kellock discloses the method of claim 135, further comprising: encoding background video into a video elementary stream; and encoding the audio contents into said one or more audio elementary streams, and wherein said audio description data describes said audio contents (**Calculate a set of distances in descriptor space between Music Sections and Sub-Styles (1403) in figure 14**).

Regarding claim 142, Fujii discloses the method of claim 135, wherein the step of encoding visual description data comprises encoding the visual description data into private data to be carried in a transport stream (**System Decode Buffer (73) in figure 2**).

Regarding claim 143, Fujii discloses the method of claim 141, further comprising multiplexing said video elementary stream, said one or more audio elementary streams and said private data into a transport stream for broadcast (**Demultiplexer (3) in figure 2**).

Regarding claim 144, Fujii discloses the method of claim 135, further comprising delivering said audio description data and said video description data to a receiver for decoding and for generating said visual display (**Packet landing Buffer (5) in figure 2**).

Regarding claim 145, Fujii discloses the method of claim 135, further comprising the step of providing said visual description data by downloading it from external media or creating it at a user terminal (**Interface Unit (14) in figure 5**).

Regarding claim 146, Kellock discloses a method of delivering Karaoke text and timing information to generate a Karaoke visual display for an audio song (**page 2 paragraph (0019) lines 9-11**), said method comprising: encoding said audio song into an audio elementary stream; inserting clock references for use in synchronising decoding of said Karaoke text and timing information with said audio song in said audio elementary stream (**page 4 paragraph (0072)**); inserting channel information of said audio song in said audio elementary stream; inserting said Karaoke text information for

said audio song in said audio elementary stream; and inserting said Karaoke timing information for generating scrolling said Karaoke text in said audio elementary stream **(column 5 paragraph (0074)).**

Regarding claims 147-148, Fujii discloses the method of claim 83, being used in digital TV broadcast and or reception **(Tuner (1) in figure 2).**

Regarding claims 149 and 152, Kellock discloses apparatus for generating relevant visual display for audio contents **(Soundtrack analyzer (112) in figure 1),** comprising: storing means for storing visual description data that generate the visual display **(page 4 paragraph (0062) lines 1-4);** playing means for playing said audio contents carried in an audio elementary stream **(Soundtrack data in figure 1);** extracting means for extracting audio description data for said audio contents from said audio elementary stream **(Audio Decoder (10) in figure 1) Fujii;** selecting means for selecting preferred visual description data from said storing means using information from said audio description data **(Video Decoder (8) in figure 1 Fujii);** and executing means for executing said visual description data to generate said visual display **(User Interface unit (13) in figure 1 Fujii).**

Regarding claim 150, Kellock discloses apparatus according to claim 149, wherein said executing means is operable to execute interactive programmes carried in said visual description data **(Output Production (108) in figure 1).**

Regarding claim 151, Fujii discloses apparatus according to claim 149, further comprising: receiving means for receiving a multiplexed transport stream

(Demultiplexer (3) in figure 2) containing one or more of said audio elementary streams and said visual description data carried as private data **(Packet Landing Buffer (6) in figure 2).**

Regarding claim 153, Kellock discloses a system according to claim 152, wherein said selecting means comprise cognitive and search engines **(page 2 paragraph (0025)).**

Regarding claim 154, Kellock discloses a system according to claim 152, being a home entertainment system **(Page 2 paragraph (0019)).**

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Franklin S. Andramuno whose telephone number is 571-270-3004. The examiner can normally be reached on Mon-Thurs (7:30am - 5:00pm) alternate Fri off (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571)272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600